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OM protein - protein search, using sw model

Run on: November 20, 2000, 14:04:07 ; Search time 16.31 Seconds

(without alignments)
329.149 Million cell updates/sec

Title: US-09-373-230-2

Perfect score: 808
Sequence: 1 NFGRLHCTTAVTRININDVL.....KKDENGDKSVMTLTNLHQS 157

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 268485 seqs, 34193795 residues

Total number of hits satisfying chosen parameters: 268485

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database :

A_Geneseq_36: *
1: /SIDSI/gcgdata/geneseq/geneseq/AA1980.DAT: *
2: /SIDSI/gcgdata/geneseq/geneseq/AA1981.DAT: *
3: /SIDSI/gcgdata/geneseq/geneseq/AA1982.DAT: *
4: /SIDSI/gcgdata/geneseq/geneseq/AA1983.DAT: *
5: /SIDSI/gcgdata/geneseq/geneseq/AA1984.DAT: *
6: /SIDSI/gcgdata/geneseq/geneseq/AA1985.DAT: *
7: /SIDSI/gcgdata/geneseq/geneseq/AA1986.DAT: *
8: /SIDSI/gcgdata/geneseq/geneseq/AA1987.DAT: *
9: /SIDSI/gcgdata/geneseq/geneseq/AA1988.DAT: *
10: /SIDSI/gcgdata/geneseq/geneseq/AA1989.DAT: *
11: /SIDSI/gcgdata/geneseq/geneseq/AA1990.DAT: *
12: /SIDSI/gcgdata/geneseq/geneseq/AA1991.DAT: *
13: /SIDSI/gcgdata/geneseq/geneseq/AA1992.DAT: *
14: /SIDSI/gcgdata/geneseq/geneseq/AA1993.DAT: *
15: /SIDSI/gcgdata/geneseq/geneseq/AA1994.DAT: *
16: /SIDSI/gcgdata/geneseq/geneseq/AA1995.DAT: *
17: /SIDSI/gcgdata/geneseq/geneseq/AA1996.DAT: *
18: /SIDSI/gcgdata/geneseq/geneseq/AA1997.DAT: *
19: /SIDSI/gcgdata/geneseq/geneseq/AA1998.DAT: *
20: /SIDSI/gcgdata/geneseq/geneseq/AA1999.DAT: *
21: /SIDSI/gcgdata/geneseq/geneseq/AA2000.DAT: *

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	806	99.8	157	R99559	Mouse mature inter
2	806	99.8	157	R92506	Interferon gamma p
3	806	99.8	157	W15704	Mouse interferon-g
4	806	99.8	157	W24262	Murine protein for
5	806	99.8	157	W77078	Mouse interleukin
6	806	99.8	157	W77159	Murine interleukin
7	806	99.8	157	W63811	Mouse IL-18 protei
8	806	99.8	157	Y39800	Interleukin-18 rec
9	806	99.8	157	Y44598	Mouse monomeric in
10	806	99.8	157	Y53905	Amino acid sequenc
11	806	99.8	157	Y57571	Murine interleukin
12	806	99.8	180	W48960	Wild-type mouse in

13	797	98.6	157	19	W77090	Mouse interleukin
14	797	98.6	157	19	W48968	Mutant mouse inter
15	796	98.5	157	19	W77091	Mouse interleukin
16	796	98.5	157	19	W48969	Mutant mouse inter
17	736.5	91.2	194	19	W53282	Amino acid sequenc
18	625	77.4	175	19	W53283	Amino acid sequenc
19	538	66.6	193	21	Y58241	Equine interleukin
20	524	64.9	157	19	W77084	Human interleukin
21	524	64.9	157	19	W48962	Mutant human inter
22	521	64.5	157	19	W77083	Human interleukin
23	521	64.5	157	19	W48961	Mutant human inter
24	518	64.1	157	19	W77077	Human interleukin
25	518	64.1	157	21	Y57570	Human interleukin
26	518	64.1	158	21	Y85167	Human interleukin-
27	518	64.1	180	19	W48959	Wild-type human in
28	518	64.1	193	18	W22047	Interferon gamma i
29	518	64.1	193	19	W46592	Amino acid sequenc
30	515	63.7	157	19	W77080	Human interleukin
31	515	63.7	157	19	W77088	Human interleukin
32	515	63.7	157	19	W48966	Mutant human inter
33	515	63.7	193	19	W77082	Interleukin 18 act
34	514	63.6	157	19	W77086	Human interleukin
35	514	63.6	157	19	W48964	Mutant human inter
36	513	63.5	157	17	R99564	Human interferon-g
37	513	63.5	157	17	R99558	Human mature inter
38	513	63.5	157	18	W15701	Interferon-gamma i
39	513	63.5	157	18	W24258	Human protein for
40	513	63.5	157	19	W77158	Human interleukin-
41	513	63.5	157	19	W63810	Human IL-18 protei
42	513	63.5	157	19	W37741	IFN-gamma inducing
43	513	63.5	157	19	W52176	Interferon-gamma i
44	513	63.5	157	20	Y39799	Interleukin-18 rec
45	513	63.5	157	21	Y44597	Human interleukin-

ALIGNMENTS

RESULT 1	
R99559	R99559 standard; Protein; 157 AA.
XX	
AC	R99559;
XX	
DT	29-SEP-1996 (first entry)
XX	
DE	Mouse mature interferon-gamma inducer protein.
XX	
KW	Interferon-gamma inducer protein; IFN-gamma; antiviral; virucide;
KW	antitumour; antibacterial; immunoregulator; adoptive immunotherapy;
KW	therapy; cancer.
XX	
OS	Mus sp.
XX	
FH	
FT	Key Location/Qualifiers
FT	Misc-difference 70 /label= Ile, Thr
XX	
PN	EP712931-A2.
XX	
PD	22-MAY-1996.
XX	
PF	10-NOV-1995; 95EP-0308055.
XX	
PR	29-SEP-1995; 95JP-0274988.
PR	15-NOV-1994; 94JP-0304203.
PR	23-FEB-1995; 95JP-0058240.
PR	10-MAR-1995; 95JP-0078357.
PR	18-SEP-1995; 95JP-0262062.
XX	
PA	(HAYB) HAYASHIBARA SEIBUTSU KAGAKU.
XX	
PI	Fukuda S, Kohno K, Kunikata T, Kurimoto M, Okamura H;

PI Taniguchi M, Tanimoto T, Torigoe K, Ushio S;
XX
DR WPI: 1996-252837/26.
DR N-PSDB; T32403.
XX
PT DNA encoding interferon-gamma prodn.-inducing polypeptide - useful
PT to treat and prevent, e.g. viral disease, malignancies and immune
PT disorders
XX
PS Example A-3-2; Page 36-37; 48pp; English.
XX
CC A novel mouse protein (R99559) induces interferon-gamma (IFN-gamma)
CC prodn. by immunocompetent cells. Its sequence was deduced from
CC that of a cDNA clone (T32403) isolated from a mouse liver library.
CC Recombinant IFN-gamma inducer protein can be produced in high yields
CC using host cells, esp. Escherichia coli, transformed with a vector
CC carrying the cDNA.
XX
SQ Sequence 157 AA;

Query Match 99.8%; Score 806; DB 17; Length 157;
Best local Similarity 100.0%; Pred. No. 6.2e-79;
Matches 157; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NEGRHCTTAVIRNINDQVLFVDKRPVEEDMTDIDQASSEPQTRLIIMYKDSVRGLA 60
Db 1 nfgrihcttavrindqvlfdvdkrpvfedmtidqassepqtrllimykdsvevrgla 60

QY 61 VTLGVKDSKXSTLSCKNKIISFEEMDPENIDDIQSDLIFFQKRVPGHNKMEFESSLYEG 120
Db 61 vtlsvkdsksxstlscknkisfeemdpenniddiqsdliiffqkrvpghnkmeffesslyeg 120

QY 121 HFLACQKEDDAFKLILKKKDENGDKSVMTLTNLHQS 157
Db 121 hflacqkeddafklilkkkdeengdksvmftltnlhqs 157

RESULT 2
R92506 standard; Protein; 157 AA.
AC R92506;
XX
DT 02-SEP-1996 (first entry)
XX
DE Interferon gamma production inducer protein.
XX
KW Interferon gamma; inducer; IFN-gamma; immunocompetent cell; antiviral;
KW antitumour; antiseptic; immunoregulatory; platelet-increasing agent;
KW therapy; prevention; condyloma acuminatum; renal cancer; brain cancer;
KW granuloma; mycosis fungoides; rheumatism; allergy; cytotoxicity; AIDS;
KW killer T-cell; interleukin-2; IL-2; tumour necrosis factor; TNF;
KW adoptive immunotherapy; monoclonal antibody.
XX
OS Mus musculus.
XX
FH Key Location/Qualifiers
FT Misc-difference 70
FT /label= Met, Thr
XX
PN EP692536-A2.
XX
PD 17-JAN-1996.
XX
PF 13-JUL-1995; 95EP-0304906.
XX
PR 10-FEB-1995; 95JP-0045057.
PR 14-JUL-1994; 94JP-0184162.
XX
PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU.
XX
PI Kohno K, Kunikata T, Kurimoto M, Okamura H, Taniguchi M;

PI Tanimoto T, Torigoe K;
XX
DR WPI: 1996-070177/08.
DR N-PSDB; T92506.
XX
PT Protein that induces gamma interferon prodn. in immuno-competent
PT cells - used e.g. as antiviral or antitumour agent, also induces
PT cytotoxicity of killer cells
XX
PS Claim 2; Page 22; 30pp; English.
XX
CC This sequence represents the interferon gamma (IFN-gamma) inducer protein
CC of the invention. This protein induces IFN-gamma production in
CC immunocompetent cells. The protein is useful as an antiviral,
CC antitumour, antiseptic, immunoregulatory and platelet-increasing agent.
CC It can be used for treating or preventing AIDS, condyloma acuminatum,
CC renal or brain cancer, granuloma, mycosis fungoides, rheumatism and
CC allergy. The protein can also be used to induce IFN-gamma production in
CC cultured cells. The IFN-gamma inducer strongly induces cytotoxicity of
CC killer T-cells and when used with interleukin-2 (IL-2) and tumour
CC necrosis factor (TNF), may improve the effect (or reduce side effects) of
CC adoptive immunotherapy in tumours. The DNA encoding this sequence can
CC be used to produce the protein, which can then be purified (or assayed)
CC using monoclonal antibodies.
XX
SQ Sequence 157 AA;

Query Match 99.8%; Score 806; DB 17; Length 157;
Best local Similarity 100.0%; Pred. No. 6.2e-79;
Matches 157; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NEGRHCTTAVIRNINDQVLFVDKRPVEEDMTDIDQASSEPQTRLIIMYKDSVRGLA 60
Db 1 nfgrihcttavrindqvlfdvdkrpvfedmtidqassepqtrllimykdsvevrgla 60

QY 61 VTLGVKDSKXSTLSCKNKIISFEEMDPENIDDIQSDLIFFQKRVPGHNKMEFESSLYEG 120
Db 61 vtlsvkdsksxstlscknkisfeemdpenniddiqsdliiffqkrvpghnkmeffesslyeg 120

QY 121 HFLACQKEDDAFKLILKKKDENGDKSVMTLTNLHQS 157
Db 121 hflacqkeddafklilkkkdeengdksvmftltnlhqs 157

RESULT 3
W15704 standard; peptide; 157 AA.
W15704
XX
AC W15704;
XX
DT 26-JAN-1998 (first entry)
XX
DE Mouse interferon-gamma inducer protein.
XX
KW Interferon-gamma, IFN-gamma; antiviral; antineoplastic; radiotherapy;
KW immunoregulatory; antitumour agent; chemotherapy; leukopenia;
KW thrombocytopaenia; immunocompetent cell; asthma; hayfever;
KW rheumatism; interleukin; killer cell.
XX
OS Mus musculus.
XX
FH Key Location/Qualifiers
FT Misc-difference 70
FT /label= Met, Thr
XX
PN EP767178-A1.
XX
PD 09-APR-1997.
XX
PF 26-SEP-1996; 96EP-0306997.
XX
PR 20-SEP-1996; 96JP-0269105.

PR 26-SEP-1995; 95JP-0270725.
PR 29-FEB-1996; 96JP-0067434.
XX
XX
PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU.
PI Akita K, Fujii M, Kurimoto M, Nukada Y, Tanimoto T;
XX WPI; 1997-205381/19.
DR N-PSDB; T60536.
XX
PT Human protein that induces interferon-gamma prodn. in
PT immuno:competent cells - useful for adoptive immuno:therapy of
PT tumours and as antimicrobial agent etc.
XX
PS Disclosure; Page 22; 26pp; English.
XX
CC The present sequence represents a novel protein from mouse liver cells,
CC which induces interferon-gamma (IFN gamma) production in immunocompetent
CC cells. This protein enhances cytotoxicity of killer cells and induces
CC their formation. It is used as an antioncotic agent for antitumour
CC immunotherapy, an antiviral (including anti-AIDS) or antibacterial agent,
CC and in the treatment of atopic or immune system diseases, e.g. asthma,
CC hayfever or rheumatism. When formulated with interleukin-3, it is also
CC used to treat leukopenia and thrombocytopenia associated with
CC radiotherapy or chemotherapy of leukaemia and other cancers. When used
CC in antitumour immunotherapy, this novel protein significantly improves
CC the immunotherapeutic effect of interleukin-2 (IL-2), compared with use
CC of IL-2 alone, either when administered to the patient (before
CC administration of IL-2) or by addition to the medium in which cells
CC (intended for return to the patient) are being grown.
XX
SQ Sequence 157 AA;

Query Match 99.8%; Score 806; DB 18; Length 157;
Best Local Similarity 100.0%; Pred. No. 6.2e-79;
Matches 157; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NEGRHCTTAVIRNINDQVLFVDKRPVEEDMTDIDQSASEPQTRLIIYMYKDESEVRGLA 60
Db 1 nfgrlhcttavinindqvlfdkrgpvfedmtddidqsasepqrlliiymykdssevrsla 60

QY 61 VTLSVKDSKXSTLSCKNKIISFEEMDPDENIDDIQSDLIFFOKRVPGHNKMEFESSLYEG 120
Db 61 vtlsvkdsksxstlscknkliisfeemdpdeniddiqsdliifqkrvpgnhkmeffesslyeg 120

QY 121 HFLACQKEDDAFKLILKKKDENGDKSVMTLTNLHQ5 157
Db 121 hflacqkeddaflilkkkdeengdksvmftltlnhqs 157

RESULT 4
W24262
ID W24262 standard; Protein; 157 AA.
XX
AC W24262;
XX
DT 15-OCT-1997 (first entry)
XX
DE Murine protein for induction of interferon-gamma.
XX
KW Interferon-gamma; immunocompetent cell; malignant tumour;
KW viral disease; bacterial infection; immune disease.
XX
OS Mus musculus.
XX
FH Key Location/Qualifiers
FT Misc-difference 70
FT /note= "Encoded by AYT"
XX
XX JP09157180-A.
PN
XX 17-JUN-1997.
PD

XX 24-JAN-1996; 96JP-0028722.
XX
XX 04-OCT-1995; 95JP-0279906.
PR 10-MAR-1995; 95JP-0078357.
PR 29-SEP-1995; 95JP-0274988.
XX
XX (HAYB) HAYASHIBARA SEIBUTSU KAGAKU.
PA WPI; 1997-369391/34.
DR N-PSDB; T80210.
XX
XX A drug containing a polypeptide which induces interferon-gamma -
PT useful for treating e.g. malignant tumours, viral, bacterial or
PT immune diseases
XX
PS Disclosure; Page 10-11; 12pp; Japanese.
XX
CC This sequence represents a protein which induces interferon-gamma
CC production in immunocompetent cells. This protein may be used as
CC the major component in a drug for the prevention and treatment of
CC e.g. malignant tumours, viral diseases, bacterial infections and
CC immune diseases.
XX
SQ Sequence 157 AA;

Query Match 99.8%; Score 806; DB 18; Length 157;
Best Local Similarity 100.0%; Pred. No. 6.2e-79;
Matches 157; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NEGRHCTTAVIRNINDQVLFVDKRPVEEDMTDIDQSASEPQTRLIIYMYKDESEVRGLA 60
Db 1 nfgrlhcttavinindqvlfdkrgpvfedmtddidqsasepqrlliiymykdssevrsla 60

QY 61 VTLSVKDSKXSTLSCKNKIISFEEMDPDENIDDIQSDLIFFOKRVPGHNKMEFESSLYEG 120
Db 61 vtlsvkdsksxstlscknkliisfeemdpdeniddiqsdliifqkrvpgnhkmeffesslyeg 120

QY 121 HFLACQKEDDAFKLILKKKDENGDKSVMTLTNLHQ5 157
Db 121 hflacqkeddaflilkkkdeengdksvmftltlnhqs 157

RESULT 5
W77078
ID W77078 standard; Protein; 157 AA.
XX
AC W77078;
XX
DT 14-DEC-1998 (first entry)
XX
DE Mouse interleukin 18 protein.
XX
KW Mouse; interleukin-18; IL-18; osteoclast; hypercalcaemia; osteopenia;
KW osteoclastoma; Behcet's syndrome; osteosarcoma; arthropathy; osteoporosis;
KW chronic rheumatoid arthritis; deformity; osteitis; primary hyperthyroidism.
XX
OS Mus sp.
XX
PN EP861663-A2.
XX
PD 02-SEP-1998.
XX
PF 24-FEB-1998; 98EP-0301352.
XX
PR 25-FEB-1997; 97JP-0055468.
XX
PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU.
XX
XX Gillespie MT, Horwood NJ, Kurimoto M, Udagawa N;
XX WPI; 1998-448964/39.
DR

XX
PI Kunikata T, Kurimoto M, Torigoe K, Ushio S;
XX
DR WPI; 1998-335317/30.
XX
PT New interleukin-18 receptor protein used to inhibit interleukin-18,
PT to treat autoimmune disease and as immunosuppressant - and new
PT monoclonal antibody and hybridoma used to detect interleukin -18
PT receptor protein
XX
PS Claim 5; Page 16-17; 35pp; English.
XX
CC This sequence represents a mouse interleukin-18 (IL-18) fragment which is
CC used in a method involved in neutralising IL-18 or to treat autoimmune
CC diseases or as an immunosuppressant using anti-IL-18 antibodies which
CC can inhibit IL-18. Such antibodies can also be used to detect the IL-18
CC receptor protein (labelled with an enzyme or a radioactive or fluorescent
CC substance). The protein is used to treat e.g. graft rejection, pernicious
CC anaemia, atrophic gastritis, insulin-resistant diabetes, Wegener
CC granulomatosis, discoid lupus erythematosus, ulcerative colitis,
CC cold-agglutinin-relating diseases, Goodpasture's syndrome, primary
CC biliary cirrhosis, sympathetic ophthalmitis, hyperthyroidism, juvenile
CC onset type diabetes, Sjogren syndrome, autoimmune hepatitis, autoimmune
CC haemolytic anaemia, myasthenia gravis, systemic scleroderma, systemic
CC lupus erythematosus, polyepic cold haemoglobinuria, polymyositis,
CC periarteritis nodosa, multiple sclerosis, Addison's disease, purpura
CC haemorrhagica, Basedow's disease, leukopaenia, Behcet's disease,
CC climacterium praecox, rheumatoid arthritis, rheumatopyra, chronic
CC thyroiditis, Hodgkin's disease, HIV, asthma, atopic dermatitis, allergic
CC nasitis, pollinosis, apitoxin-allergy and septic shock resulting from
CC production or administration of excessive gamma interferon (IFN-gamma).
XX
SQ Sequence 157 AA;

Query Match 99.8%; Score 806; DB 19; Length 157;
Best Local Similarity 100.0%; Pred. No. 6.2e-79;
Matches 157; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NEGRHCTTAVIRNINDQVLFVDRKQPVFEDMTDIDQASSEPQTRLIYMYKDESEVRGLA 60
DB 1 nfgrlhcttavrindqvlfdvdkrqpvfedmtddidqassepqtrlllymykdesevrgla 60
QY 61 VTLVSKDSKXSTLSCNKKIISFEEMDPENIDDIQSDLIFFQKRVPGHNMKEFESSLYEG 120
DB 61 vtlsvkdsksxstlscnkkisfeemdpenniddiqsdliifqkrvpgnhkmeffesslyeg 120
QY 121 HFLACQKEDDAFKLILKKKDENGDKSVMTLTNLHQS 157
DB 121 hflacqkeddafkllkkkdeengdksvmftlnlhqs 157

RESULT 8
Y39800
ID Y39800 standard; Protein; 157 AA.
XX
AC Y39800;
XX
DT 29-NOV-1999 (first entry)
XX
DE Interleukin-18 receptor protein sequence fragment.
XX
KW Interleukin-18 receptor; IL-18; human; mouse; organ transplant rejection;
KW IL-18 receptor sensitive disease; immune reaction; therapy.
XX
OS Mammalia.
XX
FH Key Location/Qualifiers
FT Misc-difference 70 /note="unspecified amino acid"
XX
PN JF11240898-A.
XX

PD 07-SEP-1999.
XX
PF 12-MAR-1998; 98JP-0078549.
XX
PR 12-MAR-1997; 97JP-0074697.
PR 28-JUL-1997; 97JP-0215488.
PR 09-OCT-1997; 97JP-0291837.
PR 26-DEC-1997; 97JP-0366908.
XX
PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU.
XX
DR WPI; 1999-555071/47.
XX
PT New polypeptide - useful against interleukin-18 receptor sensitive
PT diseases
XX
PS Disclosure; Page 37-38; 41pp; Japanese.
XX
CC This sequence is a fragment of an interleukin-18 receptor (IL-18R) of the
CC invention. The IL-18R sequences were isolated from human and mouse. The
CC sequences can be used in drugs for treating IL-18 receptor sensitive
CC disease, especially effective for the relief of rejection accompanied to
CC organ transplantation and for the treatment and the prevention of various
CC diseases caused by excessive immune reaction.
XX
SQ Sequence 157 AA;

Query Match 99.8%; Score 806; DB 20; Length 157;
Best Local Similarity 100.0%; Pred. No. 6.2e-79;
Matches 157; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NEGRHCTTAVIRNINDQVLFVDRKQPVFEDMTDIDQASSEPQTRLIYMYKDESEVRGLA 60
DB 1 nfgrlhcttavrindqvlfdvdkrqpvfedmtddidqassepqtrlllymykdesevrgla 60
QY 61 VTLVSKDSKXSTLSCNKKIISFEEMDPENIDDIQSDLIFFQKRVPGHNMKEFESSLYEG 120
DB 61 vtlsvkdsksxstlscnkkisfeemdpenniddiqsdliifqkrvpgnhkmeffesslyeg 120
QY 121 HFLACQKEDDAFKLILKKKDENGDKSVMTLTNLHQS 157
DB 121 hflacqkeddafkllkkkdeengdksvmftlnlhqs 157

RESULT 9
Y44598
ID Y44598 standard; Protein; 157 AA.
XX
AC Y44598;
XX
DT 04-APR-2000 (first entry)
XX
DE Mouse monomeric interleukin-18.
XX
KW Mouse interleukin-18; IL-18; anti-IL-18-antibody; immunopathies;
KW inflammatory disorder; autoimmune disease; anti-allergic;
KW anti-inflammatory; immunosuppressive; hematopoietic; leukocytopenic;
KW antialgic; antipyretic.
XX
OS Mus musculus.
XX
FH Key Location/Qualifiers
FT Misc-difference 70 /label= Met, Thr
XX
PN EP974600-A2.
XX
PD 26-JAN-2000.
XX
PF 24-JUN-1999; 99EP-0304977.
XX
PR 24-JUN-1998; 98JP-0177580.
XX

PR 12-OCT-1998; 98JP-0289044.
PR 22-DEC-1998; 98JP-0365023.
XX
PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU.
XX
PI Nishida Y, Okura T, Tanimoto T, Kurimoto M;
XX
DR WPI; 2000-118341/11.
XX
PT New artificially produced peptide for neutralizing biological activity
PT of interleukin-18, useful for treating and preventing immunopathies,
PT inflammatory disorders and autoimmune diseases -
XX
PS Disclosure; Page 27; 32pp; English.
XX
CC The present sequence is mouse monomeric interleukin-18. This can comprise
CC a part or the whole of the variable region in anti-interleukin-18
CC -antibody for neutralising interleukin-18. This is useful for treating
CC and preventing immunopathies, inflammatory disorders and autoimmune
CC diseases which are caused by excessive immunoreaction. The protein has
CC anti-allergic, anti-inflammatory, immunosuppressive, hematopoietic,
CC leukocytopenic, antialgic, antipyretic and hepatic-function improving
CC activities.
XX
SQ Sequence 157 AA;

Query Match 99.8%; Score 806; DB 21; Length 157;
Best Local Similarity 100.0%; Pred. No. 6.2e-79;
Matches 157; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NEGRHCTTAVIRINDQVLEFVDRKQPVFEDMTDIDQASSEPQTRLIYMYKDSYVGLA 60
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
1 nfgrihcttavrindqvlfvdkrqpvfedmtidqgsasepqrlllymykdsyrgla 60

QY 61 VTLVSKSKXSTLSCKNKIISFEEMDPENIDDIQSDLIFFQKRVPGHNKMEFESSLYEG 120
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
61 vtlsvkdsksxstlscknkisfeemdpennididqsdliiffqkrvpghnkmeffesslyeg 120

QY 121 HFLACOKEDDAFKLILKKKDGKSVMTLTNLHQS 157
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
121 hflacqkeddafklllkkkdgksgvmftltlnhqs 157

RESULT 10
Y53905 standard; Protein; 157 AA.
ID Y53905
AC Y53905;
XX
DT 13-MAR-2000 (first entry)
XX
DE Amino acid sequence of a protein that induces IFN-gamma production.
XX
KW Mouse; interferon gamma production; IFN-gamma; immunocompetent cell;
KW antiviral; immunoregulatory; antigen; mitogen;
KW IFN-gamma susceptible disease; antibacterial; antitumour;
KW blood platelet enhancing agent; hepatitis; herpes syndrome; condyloma;
KW AIDS; bacterial disease; candidiasis; malaria; solid malignant tumour;
KW renal cancer; mycosis fungoides; chronic granulomatous disease;
KW blood cell malignant tumour; adult T cell leukaemia;
KW chronic myelogenous leukaemia; malignant leukaemia; immune disease;
KW allergy; rheumatism.
XX
OS Mus sp.
XX
FH Key Location/Qualifiers
FT Misc-difference 70
FT /note= "unspecified residue encoded by AYG"
XX
PN EP962531-A2.
XX
PD 08-DEC-1999.

XX
PF 10-NOV-1995; 99EP-0104104.
XX
PR 15-NOV-1994; 94JP-0304203.
PR 23-FEB-1995; 95JP-0058240.
PR 10-MAR-1995; 95JP-0078357.
PR 18-SEP-1995; 95JP-0262062.
PR 29-SEP-1995; 95JP-0274988.
PR 10-NOV-1995; 95EP-0308055.
XX
PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU.
XX
PI Ushio S, Torigoe K, Tanimoto T, Okamura H;
XX
DR WPI; 2000-064289/06.
DR N-PSDB; 236923.
XX
PT Novel polypeptides used in the treatment of interferon-gamma
PT susceptible diseases -
XX
PS Disclosure; Page 3; 42pp; English.
XX
CC The present sequence represents a murine protein that induces interferon
CC (IFN)-gamma production by immunocompetent cells. IFN-gamma is a
CC protein which has antiviral, antitumor and immunoregulatory activities,
CC and is produced by immunocompetent cells stimulated with antigens or
CC mitogens. A probe derived from the cDNA of the present sequence was used
CC to isolate the corresponding human protein from human liver cells. The
CC protein of the invention is used to treat IFN-gamma susceptible diseases,
CC and also have use as a antiviral agent, antibacterial agent, antitumour
CC agent, immunoregulatory agent and blood platelet enhancing agent.
CC Diseases which can be treated with the protein include viral diseases
CC such as hepatitis, herpes syndrome, condyloma, and AIDS; bacterial
CC diseases such as candidiasis and malaria; solid malignant tumours such
CC as renal cancer, mycosis fungoides, and chronic granulomatous disease;
CC blood cell malignant tumours such as adult T cell leukaemia, chronic
CC myelogenous leukaemia, and malignant leukaemia; and immune diseases
CC such as allergy and rheumatism.
XX
SQ Sequence 157 AA;

Query Match 99.8%; Score 806; DB 21; Length 157;
Best Local Similarity 100.0%; Pred. No. 6.2e-79;
Matches 157; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NEGRHCTTAVIRINDQVLEFVDRKQPVFEDMTDIDQASSEPQTRLIYMYKDSYVGLA 60
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
1 nfgrihcttavrindqvlfvdkrqpvfedmtidqgsasepqrlllymykdsyrgla 60

QY 61 VTLVSKSKXSTLSCKNKIISFEEMDPENIDDIQSDLIFFQKRVPGHNKMEFESSLYEG 120
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
61 vtlsvkdsksxstlscknkisfeemdpennididqsdliiffqkrvpghnkmeffesslyeg 120

QY 121 HFLACOKEDDAFKLILKKKDGKSVMTLTNLHQS 157
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
121 hflacqkeddafklllkkkdgksgvmftltlnhqs 157

RESULT 11
Y57571 standard; protein; 157 AA.
ID Y57571
AC Y57571;
XX
DT 06-MAR-2000 (first entry)
XX
DE Murine interleukin 18 protein sequence SEQ ID NO:2.
XX
KW Murine; interleukin 18; IL-18; potentiator; IGF; tumour; cancer;
KW interferon-gamma-inducing factor; growth inhibition; cytostatic.
XX
OS Mus sp.

XX PN WO9959565-A1.
XX PD 25-NOV-1999.
XX PF 20-MAY-1999; 99WO-US11160.
XX PR 21-MAY-1998; 98US-0086560.
XX PA (SMIK) SMITHKLINE BECHAM CORP.
XX PI Johnson RK;
XX DR WPI; 2000-062368/05.
XX PT New polypeptides, useful for preparation of composition for preventing
XX PT and/or treating cancer by inhibiting tumor growth
XX PS Claim 2; Page 50; 53pp; English.
XX CC The present sequence represents murine interleukin 18 (IL-18). The
XX CC present invention describes a compound comprising human or murine IL-18
XX CC in combination with a chemotherapeutic agent (1). Also described are:
XX CC (1) a method of preventing and/or treating cancer in a mammal comprising
XX CC the administration of a cancer inhibiting amount of (1) comprising the
XX CC IL-18 protein and the chemotherapeutic agent and optionally a
XX CC pharmaceutically acceptable carrier; and (2) a method of inhibiting the
XX CC growth of tumor cells in a mammal sensitive to a composition comprising
XX CC human IL-18 and/or murine IL-18 and the chemotherapeutic agent (and
XX CC optionally a pharmaceutically acceptable carrier), comprising
XX CC administering to a mammal afflicted with the tumor cells an effective
XX CC tumor cell growth inhibiting amount of (1). The IL-18 protein in
XX CC conjunction with a chemotherapeutic agent is useful in a method for
XX CC preventing and/or treating cancer in mammals by inhibiting the growth
XX CC of tumors or cancerous cells in mammals.
XX SQ Sequence 157 AA;
QY Query Match 99.8%; Score 806; DB 21; Length 157;
QY Best Local Similarity 99.4%; Pred. No. 6.2e-79;
QY Matches 156; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Db 1 NFGRLHCTTAVIRNINDQVLFVDRKQPVFEDMTDIDQASASEPQTRLIIYMKDSEVRGLA 60
1 nfgrlhcttavrlnindqvlfdvdkrpvfedmtdidqasasepqrlliiymkxdevrgla 60
QY 61 VTLSVKDSKXSTLSCNKKIISFEEMDPENIDDIQSDLIFFQKRVPGHNKMEFESSLYEG 120
61 vtlsvkdsksstlscknkiisfeemdpennididqsdliifqkrvpghnkmeffesslyeg 120
Db 61 vtlsvkdsksstlscknkiisfeemdpennididqsdliifqkrvpghnkmeffesslyeg 120
QY 121 HFLACQKEDDAFKLILKKKDKNGKSVMTLTNLHQS 157
121 hflacqkeddafklilkkkdkngksvmtltlnl hqs 157
Db 121 hflacqkeddafklilkkkdkngksvmtltlnl hqs 157
RESULT 12
W48960 ID W48960 standard; Peptide; 180 AA.
XX AC W48960;
XX DT 25-SEP-1998 (first entry)
XX DE Wild-type mouse interferon-gamma inducing factor.
XX KW Interferon-gamma inducing factor; interferon-gamma; killer cell;
XX KW antitumor agent; antiviral agent; antimicrobial agent; tumour; mIGIF;
XX KW hepatitis; malaria; tuberculosis; renal carcinoma; rheumatism; AIDS;
XX KW osteoporosis; thrombopenia; acquired immunodeficiency syndrome.
XX OS Mus sp.
XX XX

FH Key Location/Qualifiers
FT Peptide 1..23
FT Protein /note= "Signal peptide"
FT Protein 24..180
FT FT /note= "Mature mouse IGIF which is claimed by the
FT FT inventors under claim 4 in the specification"
XX PN EP845530-A2.
XX PD 03-JUN-1998.
XX PF 28-NOV-1997; 97EP-0309632.
XX PR 14-NOV-1997; 97JP-0329715.
XX PR 29-NOV-1996; 96JP-033037.
XX PR 21-JAN-1997; 97JP-0020906.
XX PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU.
XX PI Kurimoto M, Okamoto I, Yamamoto K;
XX PI Kurimoto M, Okamoto I, Yamamoto K;
XX DR WPI; 1998-288747/26.
XX DR N-PSDB; V32755.
XX PT Mutants of interferon-gamma inducing polypeptide - useful as
XX PT antitumor, antiviral, antimicrobial or anti-immunopathic agents
XX PS Claim 4; pages 38-39; 59pp; English.
XX CC The present sequence represents the wild-type mouse interferon-gamma
XX CC inducing factor (mIGIF). The invention provides for mutant human and
XX CC mouse interferon-gamma inducing factors in which one or more cysteine
XX CC residues are replaced with different residues at or away from the
XX CC consensus sequences shown in W48956-W48958. The mutant mIGIFs are
XX CC capable of stimulating immunocompetent cells for the production of
XX CC interferon-gamma and are claimed to be less toxic, more active and stable
XX CC than the corresponding wild type mIGIF. The mutant mIGIFs are also
XX CC claimed to enhance killer cell cytotoxicity and/or induce killer cell
XX CC formation, and may therefore be useful as antitumor agents, antitumor
XX CC immunotherapeutics, antiviral agents and antimicrobial agents. The
XX CC mutant mIGIFs are also claimed to be useful for treating hepatitis,
XX CC acquired immunodeficiency syndrome (AIDS), malaria, tuberculosis, solid
XX CC malignant tumours (e.g. renal carcinoma), rheumatism, osteoporosis and
XX CC thrombopenia caused by radiation- and chemo-therapy.
XX SQ Sequence 180 AA;
QY Query Match 99.8%; Score 806; DB 19; Length 180;
QY Best Local Similarity 99.4%; Pred. No. 7.5e-79;
QY Matches 156; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Db 1 NFGRLHCTTAVIRNINDQVLFVDRKQPVFEDMTDIDQASASEPQTRLIIYMKDSEVRGLA 60
1 nfgrlhcttavrlnindqvlfdvdkrpvfedmtdidqasasepqrlliiymkxdevrgla 60
QY 61 VTLSVKDSKXSTLSCNKKIISFEEMDPENIDDIQSDLIFFQKRVPGHNKMEFESSLYEG 120
61 vtlsvkdsksstlscknkiisfeemdpennididqsdliifqkrvpghnkmeffesslyeg 120
Db 84 vtlsvkdsksstlscknkiisfeemdpennididqsdliifqkrvpghnkmeffesslyeg 143
QY 121 HFLACQKEDDAFKLILKKKDKNGKSVMTLTNLHQS 157
121 hflacqkeddafklilkkkdkngksvmtltlnl hqs 157
Db 144 hflacqkeddafklilkkkdkngksvmtltlnl hqs 180
RESULT 13
W77090 ID W77090 standard; Peptide; 157 AA.
XX AC W77090;
XX DT 16-NOV-1998 (first entry)
XX XX

DE Mouse interleukin 18 derivative 1.
XX
KW Mouse; interleukin-18; IL-18; osteoclast; hypercalcaemia; osteopenia;
KW osteoclastoma Behcet's syndrome; osteosarcoma; arthropathy; osteoporosis;
KW chronic rheumatoid arthritis; deformity osteitis; primary hyperthyroidism.
XX
OS Mus sp.
XX
PN EP861663-A2.
XX
PD 02-SEP-1998.
XX
PF 24-FEB-1998; 98EP-0301352.
XX
PR 25-FEB-1997; 97JP-0055468.
XX
PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU.
XX
PI Gillespie MT, Horwood NJ, Kurimoto M, Udagawa N;
XX
DR WPI; 1998-448964/39.
XX
PT Use of interleukin-18 to inhibit osteoclast formation - in treatment
PT of e.g. hypercalcaemia, osteoclastoma, Behcet's syndrome,
PT osteosarcoma, chronic rheumatoid arthritis, deformity osteitis,
PT primary hyperthyroidism and osteoporosis
XX
PS Disclosure; Page 34; 56pp; English.
XX
CC Interleukin-18 (IL-18) or a functional equivalent can be used for
CC inhibition of osteoclast formation. IL-18 is used for treating or
CC preventing osteoclast-related diseases e.g. hypercalcaemia, osteoclastoma
CC Behcet's syndrome, osteosarcoma, arthropathy, chronic rheumatoid
CC arthritis, deformity osteitis, primary hyperthyroidism, osteopenia and
CC osteoporosis.
XX
SQ Sequence 157 AA;
XX
Query Match 98.6%; Score 797; DB 19; Length 157;
Best Local Similarity 98.7%; Pred. No. 5.7e-78;
Matches 155; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 NFGRLHCTTAVIRNINDQVLFVDKRPVFEDMTDIDQASASEPQTRLIYMYKDESEVRGLA 60
Db 1 nfgrlhattavirninndqvlfdvdkrpfvfdmtddidqsasepqrlllymykdesevrgla 60
QY 61 VTLSVKDSKXSTLSCKNKIISFEEMDPENIDDIQSDLIFFQKRVPGHNKMEFESSLYEG 120
Db 61 vtlsvkdsksmtlscnknkissfeemdpennididqsdlifffqkrvpghnkmefesslyeg 120
QY 121 HFLACQKEDDAFKLILKKKDKDENGKSVMTLTNLHQ 157
Db 121 hflacqkeddaflilkkkkdengdksvmftlnlhqs 157
RESULT 14
W48968
ID W48968 standard; Peptide; 157 AA.
XX
AC W48968;
XX
DT 25-SEP-1998 (first entry)
XX
DE Mutant mouse interferon-gamma inducing factor mIGIF/MUT11.
XX
KW Interferon-gamma inducing factor; interferon-gamma; killer cell;
KW antitumour agent; antiviral agent; antimicrobial agent; tumour; mIGIF;
KW hepatitis; malaria; tuberculosis; renal carcinoma; rheumatism; AIDS;
KW osteoporosis; thrombopenia; acquired immunodeficiency syndrome.
XX
OS Mus sp.
OS Synthetic.

XX
FH Key Location/Qualifiers
FT Misc-difference 7 /note= "changed from Cys in wild-type to Ala in
FT mutant"
XX
PN EP845530-A2.
XX
PD 03-JUN-1998.
XX
PF 28-NOV-1997; 97EP-0309632.
XX
PR 14-NOV-1997; 97JP-0329715.
PR 29-NOV-1996; 96JP-0333037.
PR 21-JAN-1997; 97JP-0020906.
XX
PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU.
XX
PI Kurimoto M, Okamoto I, Yamamoto K;
XX
DR WPI; 1998-288747/26.
DR N-PSDB; V32632.
XX
PT Mutants of interferon-gamma inducing polypeptide - useful as
PT antitumour, antiviral, antimicrobial or anti-immunopathic agents
XX
PS Claim 6; page 44; 59pp; English.
XX
CC The present sequence represents the mutant mouse interferon-gamma
CC inducing factor mIGIF/MUT11. The wild-type mouse interferon-gamma
CC factor (mIGIF) sequence is shown in W48960. The invention provides for
CC mutant human and mouse interferon-gamma inducing factors in which one
CC or more cysteine residues are replaced with different residues at or away
CC from the consensus sequences shown in W48956-W48958. The mutant mIGIFs
CC are capable of stimulating immunocompetent cells for the production of
CC interferon-gamma and are claimed to be less toxic, more active and stable
CC than the corresponding wild type mIGIF. The mutant mIGIFs are also
CC claimed to enhance killer cell cytotoxicity and/or induce killer cell
CC formation, and may therefore be useful as antitumour agents, antitumour
CC immunotherapeutics, antiviral agents and antimicrobial agents. The
CC mutant mIGIFs are also claimed to be useful for treating hepatitis,
CC acquired immunodeficiency syndrome (AIDS), malaria, tuberculosis, solid
CC malignant tumours (e.g. renal carcinoma), rheumatism, osteoporosis and
CC thrombopenia caused by radiation- and chemo-therapy.
XX
SQ Sequence 157 AA;
XX
Query Match 98.6%; Score 797; DB 19; Length 157;
Best Local Similarity 98.7%; Pred. No. 5.7e-78;
Matches 155; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 NFGRLHCTTAVIRNINDQVLFVDKRPVFEDMTDIDQASASEPQTRLIYMYKDESEVRGLA 60
Db 1 nfgrlhattavirninndqvlfdvdkrpfvfdmtddidqsasepqrlllymykdesevrgla 60
QY 61 VTLSVKDSKXSTLSCKNKIISFEEMDPENIDDIQSDLIFFQKRVPGHNKMEFESSLYEG 120
Db 61 vtlsvkdsksmtlscnknkissfeemdpennididqsdlifffqkrvpghnkmefesslyeg 120
QY 121 HFLACQKEDDAFKLILKKKDKDENGKSVMTLTNLHQ 157
Db 121 hflacqkeddaflilkkkkdengdksvmftlnlhqs 157
RESULT 15
W77091
ID W77091 standard; Peptide; 157 AA.
XX
AC W77091;
XX
DT 16-NOV-1998 (first entry)
XX

DE Mouse interleukin 18 derivative 2.
XX
KW Mouse; interleukin-18; IL-18; osteoclast; hypercalcaemia; osteopenia;
osteoclastoma Behcet's syndrome; osteosarcoma; arthropathy; osteoporosis;
KW chronic rheumatoid arthritis; deformity osteitis; primary hyperthyroidism.
XX
OS Mus sp.
XX
PN EP861663-A2.
XX
PD 02-SEP-1998.
XX
PE 24-FEB-1998; 98EP-0301352.
XX
PR 25-FEB-1997; 97JP-0055468.
XX
PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU.
XX
PI Gillespie MT, Horwood NJ, Kurimoto M, Udagawa N;
XX
DR WPI; 1998-448964/39.
XX
PT Use of interleukin-18 to inhibit osteoclast formation - in treatment
of e.g. hypercalcaemia, osteoclastoma, Behcet's syndrome,
PT osteosarcoma, chronic rheumatoid arthritis, deformity osteitis,
PT primary hyperthyroidism and osteoporosis
XX
PS Disclosure; Page 34-35; 56pp; English.
XX
CC Interleukin-18 (IL-18) or a functional equivalent can be used for
inhibition of osteoclast formation. IL-18 is used for treating or
CC preventing osteoclast-related diseases e.g. hypercalcaemia, osteoclastoma
CC Behcet's syndrome, osteosarcoma, arthropathy, chronic rheumatoid
CC arthritis, deformity osteitis, primary hyperthyroidism, osteopenia and
CC osteoporosis.
XX
SQ Sequence 157 AA;

Query Match 98.5%; Score 796; DB 19; Length 157;
Best Local Similarity 98.7%; Pred. No. 7.3e-78;
Matches 155; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 NFGRLHCTTAVIRNINDOVLFDKRPVEFEDMTDIDQASASEPQTRLIITYMKDSEVRGLA 60
DB 1 nfgrlhcttavirindvylfvdkrpvefedmtddidqsasepqrlllymykdsevrqla 60
QY 61 VTLSVKDSKXSTLSCKNKTIISFEEMDPENIDDIQSDLIFFQKRVPGHNKMEFEESLYEG 120
DB 61 vtlsvkdsksstlscknkstisfeemdpenniddiqsdlifffqkrvpgnhkmeffesslyeg 120
QY 121 HFLACQKEDDAFKLILKKKDENGDKSVMEFTLTNLHQS 157
DB 121 hflasqkeddafklllkkkdengdksvmftltnlqs 157

Search completed: November 20, 2000, 14:05:59
Job time: 112 sec

